

2.2 Cultural Resources

Cultural resources are defined as archaeological and historic sites, buildings, structures, objects, and human remains. This section of the Program Environmental Impact Report describes the existing cultural resources in San Diego County, analyzes the potential impacts that may occur under the Integrated Vector Management Program (Proposed Project or IVMP) activities, recommends mitigation measures to reduce or avoid impacts to these resources, and examines levels of significance after mitigation. This section is based on the *Cultural Resources Technical Report* (HELIX 2021b; Appendix C), the *County of San Diego Guidelines for Determining Significance – Cultural Resources: Archaeological and Historic Resources* (County 2007b), and Appendix G of the California Environmental Quality Act (CEQA) Guidelines.

2.2.1 Existing Conditions

Cultural resources are found throughout San Diego County and are reminders of the county's prehistoric and historic past. Archaeological and historical resources are the remains left by the people who made and used them and may include gathering areas, landmarks, significant historical buildings, and ethnographic locations, as well as physical artifacts. Archaeological resources include prehistoric and historic artifacts and features, and historic resources refer to the built environment 50 years or older. These resources can provide clues to prehistoric and historic human behaviors and provide scientific, religious, and other valuable information about the cultural past. Cultural resources can be located throughout the county and are irreplaceable; therefore, such resources are considered vital to the general welfare of all county residents.

Cultural Setting

Cultural resources can be identified and evaluated based on standard criteria established by the National Register of Historic Places (NRHP), California Register of Historical Resources (CRHR), CEQA, and San Diego County Local Register of Historical Resources. The integrity of the resource, its attributes, and its location are also key factors in establishing its significance. Resource significance is assigned to districts, sites, buildings, structures, and objects that possess exceptional value or quality illustrating or interpreting the heritage of San Diego County in history, architecture, archaeology, engineering, and culture that possess a high degree of integrity.

Prehistoric Period

The following cultural history outlines and describes the known prehistoric background for San Diego County. The approximately 12,000 years of documented prehistory of the San Diego region has often been divided into three periods: Early Prehistoric Period (San Dieguito Tradition/complex), Archaic Period (San Dieguito Tradition, Milling Stone Horizon, Encinitas Tradition, La Jolla, and Pauma complexes), and Late Prehistoric Period (Cuyamaca and San Luis Rey complexes).

Early Prehistoric Period

The Early Prehistoric Period represents the time period of the first known inhabitants in California. Terminology used for the prehistory of San Diego County includes a mixture of ideas of ordering archaeological sites using terms for peoples, collections of artifacts, and temporal time frames. The earliest well-documented sites in the San Diego area belong to the San Dieguito Tradition, dating to more than 9,000 years ago (Warren 1967; Warren et al. 1998). The San Dieguito

Tradition is thought by most researchers to emphasize big game hunting and coastal resources (Warren 1967). Diagnostic material culture associated with the San Dieguito complex includes scrapers, scraper planes, choppers, large blades, and large projectile points (Rogers 1939; Warren 1967). The San Dieguito Tradition has been documented mostly in the coastal and near-coastal areas of the county, as well as in the southeastern California deserts, but with some evidence for it recently exhibited in both the eastern mountains of the county and the coastal area north of the county.

Archaic Period

The Archaic Period includes the San Dieguito, La Jolla, and Pauma complexes, which are poorly defined, as are the interrelationships between contemporaneous inland, desert, and coastal assemblages. Initially believed to represent big game hunters, the San Dieguito people are better typified as a hunting and gathering society. These people had a relatively diverse and non-specialized economy wherein relatively mobile bands accessed and used a wide range of plant, animal, and lithic (stone) resources. A high number of archaeological site assemblages dating to this period have been identified at a range of coastal and inland locations. These assemblages, designated as the La Jolla and Pauma complexes, are considered part of Warren's (1968) "Encinitas Tradition" and Wallace's (1955) "Early Milling Stone Horizon." The Encinitas Tradition is generally "recognized by millingshield assemblages in shell middens, often near sloughs and lagoons" (Moratto 1984), and brings a shift toward a more generalized economy and an increased emphasis on seed resources, small game, and shellfish.

The local cultural manifestations of the Archaic Period are called the La Jolla complex along the coast and the Pauma complex inland. Pauma complex sites lack the shell that dominates many La Jolla complex site assemblages. Sites dating to the Archaic Period are numerous along the coast, in near-coastal valleys, and around estuaries. In the inland areas of San Diego County, sites associated with the Archaic Period are less common relative to the Late Prehistoric complexes that succeed them (Cooley and Barrie 2004; Raven-Jennings and Smith 1999; True 1970). The La Jolla complex tool assemblage is dominated by rough cobble tools, especially choppers and scrapers (Moriarty 1966). The La Jolla complex tool assemblage includes manos and metates, terrestrial and marine mammal remains, flexed burials, doughnut stones, discoidals, stone balls, plummets, bifacial points, beads, and bone tools (True 1958, 1980).

While there has been considerable debate about whether San Dieguito and La Jolla patterns might represent the same people using different environments and subsistence techniques or whether they are separate cultural patterns (Bull 1983; Ezell 1987; Gallegos 1987; Warren et al. 1998), abrupt shifts in subsistence and new tool technologies occurred at the onset of the Late Prehistoric Period.

Late Prehistoric Period

The Late Prehistoric Period is characterized by higher population densities and intensification of social, political, and technological systems. The Late Prehistoric Period is represented by the San Luis Rey complex in the northern portion of the county and the Cuyamaca complex in the southern portion of the county. Late prehistoric artifactual material known for the region is characterized by Tizon Brown Ware pottery, various cobble-based tools (e.g., scrapers, choppers, and hammerstones), arrow shaft straighteners, pendants, manos and metates, and mortars and pestles. The arrow point assemblage is dominated by the Desert Side-notched series, but the Cottonwood series and the Dos Cabezas Serrated type also occur. Subsistence is thought to have been focused on the use of acorns and grass seeds, with small game serving as a primary

protein resource and big game as a secondary protein resource. Fish and shellfish were also secondary resources, except immediately adjacent to the coast where they assumed primary importance (Bean and Shipek 1978; Luomala 1978; Sparkman 1908). The settlement system is characterized by seasonal villages where people used a central-based collecting subsistence strategy.

Based on ethnographic data, including the areas defined for the Hokan-based Yuman-speaking peoples at the time of contact, it is now generally accepted that the Cuyamaca complex is associated with the Kumeyaay people, also known as Ipai, Tipai, or Diegueño (named for Mission San Diego de Alcalá). Agua Hedionda Creek is often described as the division between the territories of the Luiseño (Takis Shoshonean-speaking peoples) and the Kumeyaay people (Bean and Shipek 1978; Luomala 1978), although various archaeologists and ethnographers use slightly different boundaries.

Historic Period

The following cultural history outlines and describes the known historic background for San Diego County. The history of San Diego County is commonly presented in terms of Spanish, Mexican, and American political domination.

Spanish Period (1769 to 1821)

The Spanish Period represents exploration and the establishment of the San Diego Presidio and missions at San Diego (1769) and San Luis Rey (1798) and *asistencias* (chapels) to the San Diego Mission at Santa Ysabel (1818) and to the San Luis Rey Mission at Pala (1816). Horses, cattle, agricultural foods, weed seeds, and a new architectural style and method of building construction were also introduced.

While Juan Rodriguez Cabrillo visited San Diego briefly in 1542, the beginning of the historic period in the San Diego area is generally given as 1769. During the mid-eighteenth century, Spain had escalated its involvement in California from exploration to colonization (Weber 1992), and it was that year that the Royal Presidio of San Diego was founded on a hill overlooking the San Diego River. Initially, both a mission and a military presidio were on Presidio Hill overlooking the San Diego River. A small pueblo, now known as Old Town San Diego, developed below the presidio. The Mission San Diego de Alcalá was constructed in its current location 5 years later. The economy of Alta California during the Spanish Period was based on cattle ranching at the missions and a few Spanish land grant ranchos. A minor amount of agriculture and commerce took place in and around San Diego.

Mexican Period (1821 to 1848)

Mexico, including Alta California, gained its independence from Spain in 1821, but Spanish culture and influence remained as the missions continued to operate as they had in the past; laws governing the distribution of land were also retained for a period. Following secularization of the missions in 1834, large ranchos were granted to prominent and well-connected individuals. During this period, society made a transition from one dominated by the church and the military to a more civilian focus, with people living on ranchos or in pueblos. With numerous new ranchos, cattle ranching expanded and prevailed over agricultural activities. These ranches put new pressures on California's native populations because grants were made for inland areas still occupied by the Kumeyaay, forcing them to acculturate or relocate farther into the backcountry. In rare instances, former mission neophytes were able to organize pueblos and attempt to live within the

new confines of Mexican governance and culture. The most successful of these was the Pueblo of San Pasqual, located inland along the San Dieguito River Valley, founded by the Kumeyaay who were no longer able to live at the Mission San Diego de Alcalá (Carrico 2008). The Mexican Period ended in 1848 as a result of the Mexican-American War.

American Period (1848 to Present)

The American Period began when Mexico ceded California to the United States after the Mexican-American War (1846–1848), which concluded with the signing of the Treaty of Guadalupe Hidalgo. The terms of the treaty brought about the creation of the Lands Commission in response to the Homestead Act of 1851, which was adopted as a means of validating and settling land ownership claims. A great influx of settlers to California and the San Diego region occurred during the American Period, resulting from several factors, including the discovery of gold in the State in 1848, the end of the Civil War, the availability of free land through the passage of the Homestead Act, and later, the importance of San Diego County as an agricultural area supported by roads, irrigation systems, and connecting railways. The increase in American and European populations quickly overwhelmed many of the Spanish and Mexican cultural traditions and greatly increased the rate of population decline among Native American communities.

At the beginning of the American Period, Old Town San Diego remained the center of civic life in the region; however, the San Diego River was prone to major floods, and in the 1870s, what is now downtown San Diego, then known as Horton's Addition, became the urban center. The 1880s saw "boom and bust" cycles that brought thousands of people to San Diego County. By the end of the decade, many had left, although some remained to form the foundations of small communities based on dry farming, orchards, dairies, and livestock ranching. During the late-nineteenth and early-twentieth centuries, rural areas of San Diego County developed small agricultural communities centered on one-room schoolhouses. Such rural farming communities consisted of individuals and families tied together through geographical boundaries, a common schoolhouse, and a church.

The influence of military development, beginning in 1916 and 1917 (during World War I), moved much of the population away from the ranching and agricultural lifestyles. After World War II, San Diego County experienced massive development. New roadways, freeways, infrastructure, tract housing and multi-family housing developments, and commercial and recreational developments were constructed in the 1950s, 1960s, and 1970s. San Diego became California's second-largest city, with a population of 696,474, with the overall county population being greater than 1.3 million by 1970 (San Diego History Center 2020). San Diego County continued to grow in population and development into the last decades of the twentieth century.

2.2.2 Regulatory Setting

Cultural resources in San Diego County are protected through a number of regulations at the federal, State, and local levels. Below is a listing and brief description of some of the various regulations and standards that relate to cultural resources within the county.

2.2.2.1 *Federal*

National Historic Preservation Act

The National Historic Preservation Act was passed in 1966 and set the foundation for much of the more specific legislation that guides cultural resource protection and management in local

jurisdictions, such as the County of San Diego. The act established an Advisory Council on Historic Preservation to help implement and monitor it. Section 106 of the National Historic Preservation Act requires federal agencies to take into account the effects of their undertakings on historic properties and to afford the Advisory Council a reasonable opportunity to comment on such undertakings. The goal of the Section 106 process is to identify historic properties potentially affected by the undertaking, assess its effects, and seek ways to avoid, minimize, or mitigate any adverse effects on historic properties.

National Register of Historic Places

Developed in 1981, the NRHP is an authoritative guide to be used by federal, State, and local governments, private groups, and citizens to identify the nation's cultural resources and to indicate what properties should be considered for protection from destruction or impairment. Listing of private property on the NRHP does not prohibit under federal law or regulation any actions that may otherwise be taken by the property owner with respect to the property.

National Historic Landmarks Program

The National Historic Landmarks Program, developed in 1982, identifies and designates National Historic Landmarks and encourages the long-range preservation of nationally significant properties that illustrate or commemorate the history and prehistory of the United States. These regulations set forth the criteria for establishing national significance and the procedures used by the U.S. Department of the Interior for conducting the National Historic Landmarks Program.

Native American Graves Protection and Repatriation Act

Enacted in 1990, the Native American Graves Protection and Repatriation Act (NAGPRA) conveys to Native American of demonstrated lineal descent the human remains and funerary or religious items that are held by federal agencies and federally supported museums or that have been recovered from federal lands. It also makes the sale or purchase of Native American remains illegal, whether or not they derive from federal or Native American lands.

Secretary of the Interior's Standards

The Secretary of the Interior is the head of the U.S. Department of the Interior, which is the nation's principal conservation agency. The department oversees the Bureau of Land Management, the Bureau of Indian Affairs, and the National Park Service.

Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation (Federal Register 1983, Vol. 48, No. 190, 44720–44723)

The purpose of the Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation of 1983 is to (1) organize the information gathered about preservation activities; (2) describe results to be achieved by federal agencies, States, and others when planning for the identification, evaluation, registration, and treatment of historic properties; and (3) integrate the diverse efforts of many entities performing historic preservation into a systematic effort to preserve the nation's cultural heritage.

2.2.2.2 State

California Environmental Quality Act

CEQA (PRC 21084.1) and the CEQA Guidelines (14 CCR 15064) discuss significant cultural resources as “historical resources,” which are defined as:

1. Resources listed or determined eligible by the State Historical Resources Commission for listing in the CRHR (14 CCR 15064.5[a][1]);
2. Resources either listed in the NRHP or in a “local register of historical resources” or identified as significant in a historical resource survey meeting the requirements of Section 5024.1(g) of the California Public Resources Code [PRC] unless “the preponderance of evidence demonstrates that it is not historically or culturally significant” (14 CCR 15064.5[a][2]); or
3. Resources determined by the Lead Agency to meet the criteria for listing in the CRHR (14 CCR 15064.5[a][3]).

For listing in the CRHR, a historical resource must be significant at the local, State, or national level under one or more of the following four criteria:

1. It is associated with events that have made a significant contribution to the broad patterns of local or regional history or the cultural heritage of California or the United States;
2. It is associated with the lives of persons important to local, California, or national history;
3. It embodies the distinctive characteristics of a type, period, region, or method of construction or represents the work of a master or possesses high artistic values; or
4. It has yielded or has the potential to yield information important to the prehistory or history of the local area, California, or the nation.

Under Title 14, Section 15064.5(a)(4), of the California Code of Regulations, a resource may also be considered a “historical resource” for the purposes of CEQA at the discretion of the Lead Agency.

All resources that are eligible for listing in the CRHR must have integrity, which is the authenticity of a historical resource’s physical identity evidenced by the survival of characteristics that existed during the resource’s period of significance. Resources, therefore, must retain enough of their historic character or appearance to be recognizable as historical resources and to convey the reasons for their significance. Integrity is evaluated with regard to the retention of location, design, setting, materials, workmanship, feeling, and association. In an archaeological deposit, integrity is assessed with reference to the preservation of material constituents and their culturally and historically meaningful spatial relationships. A resource must also be judged with reference to the particular criteria under which it is proposed for nomination.

According to the CEQA Guidelines (Section 15064.5[b]), a project with an effect that may cause a substantial adverse change in the significance of a historical resource is a project that may have a significant effect on the environment. CEQA defines a substantial adverse change as:

- (1) Substantial adverse change in the significance of an historical resource means physical demolition, destruction, relocation, or alteration of the resource or its immediate surroundings such that the significance of an historical resource would be materially impaired.
- (2) The significance of an historical resource is materially impaired when a project:
 - (a) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its inclusion in, or eligibility for, inclusion in the California Register of Historical Resources; or
 - (b) Demolishes or materially alters in an adverse manner those physical characteristics that account for its inclusion in a local register of historical resources pursuant to section 5020.1(k) of the Public Resources Code or its identification in an historical resources survey meeting the requirements of section 5024.1(g) of the Public Resources Code, unless the public agency reviewing the effects of the project establishes by a preponderance of evidence that the resource is not historically or culturally significant; or
 - (c) Demolishes or materially alters in an adverse manner those physical characteristics of a historical resource that convey its historical significance and that justify its eligibility for inclusion in the California Register of Historical Resources as determined by a lead agency for purposes of CEQA.

Section 15064.5 of the CEQA Guidelines applies to effects on archaeological sites and contains additional provisions regarding archaeological sites. If an archaeological site does not meet the criteria defined in subsection (a) as a historical resource but does meet the definition of a unique archaeological resource in PRC Section 21083.2, the site shall be treated in accordance with the provisions of Section 21083.2. The time and cost limitations described in PRC Section 21083.2(c–f) do not apply to surveys and site evaluation activities intended to determine whether the project location contains unique archaeological resources. If an archaeological resource is neither a unique archaeological nor a historical resource, the effects of the project on those resources shall not be considered a significant effect on the environment. It shall be sufficient that both the resource and the effect on it are noted in the environmental document, if one is prepared to address impacts on other resources, but they need not be considered further in the CEQA process.

Sections 15064.5(d) and (e) contain additional provisions regarding human remains. Regarding Native American human remains, paragraph (d) provides the following:

When an initial study identifies the existence of, or the probable likelihood, of Native American human remains within the project, a Lead Agency shall work with the appropriate Native Americans as identified by the Native American Heritage Commission as provided in Public Resources Code section 5097.98. The applicant may develop an agreement for treating or disposing of, with appropriate dignity, the human remains and any items associated with Native American burials with the appropriate Native Americans as identified by the Native American Heritage Commission.

California Assembly Bill 52

California Assembly Bill 52 revised PRC Section 21074 to include Tribal Cultural Resources as an area of CEQA environmental impact analysis. As such, Section 2.4 of this PEIR addresses Tribal Cultural Resources. Further, per new PRC Section 21080.3, a CEQA Lead Agency must consult with any California Native American tribe that requests consultation and that is traditionally and culturally affiliated with the geographic area of a proposed project to identify resources of cultural or spiritual value to the tribe, even if such resources are already eligible as historical resources as a result of cultural resources studies.

A Tribal Cultural Resource may be considered significant if it is (i) included in a local or State register of historical resources, (ii) determined by the Lead Agency to be significant pursuant to criteria set forth in PRC Section 5024.1, (iii) a geographically defined cultural landscape that meets one or more of these criteria, (iv) a historical resource described in PRC Section 21084.1 or a unique archaeological resource described in PRC Section 21083.2, or (v) a non-unique archaeological resource if it conforms with the above criteria.

State Historical Landmarks Program

The State Historical Landmarks Program places an emphasis on well-known places and events in California history. The goals of the program include the preservation and maintenance of registered landmarks, most of which include missions, early settlements, battles, and gold rush sites. As of August 2022, 74 historical landmarks had been registered for San Diego County and 11,063 historical landmarks had been registered for California.

State Points of Historical Interest Program

The State Points of Historical Interest Program was established in the effort to accommodate local historic properties not able to meet the restrictive criteria of the State Historical Landmarks Program. The State Points of Historical Interest Program requires the participation of local governmental officials, such as the chairperson of the Board of Supervisors, in the approval process. As of August 2022, 17 properties had been listed in the State Points of Historical Interest Program for San Diego County and 853 properties had been listed for California.

California Register of Historical Resources

The CRHR is an authoritative guide for use by State and local agencies, private groups, and citizens to identify the State's historical resources. A historical resource can include any object, building, structure, site, area, or place that is determined to be historically or archaeologically significant. The CRHR also identifies historical resources for State and local planning purposes, determines eligibility for State historic preservation grant funding, and provides a certain measure of protection under CEQA.

California Native American Graves Protection and Repatriation Act

The California NAGPRA of 2001 conveys to Native Americans of demonstrated lineal descent the human remains and funerary items that are held by State agencies and museums.

California Health and Safety Code

The California Health and Safety Code, Section 7050.5, requires that, in the event of discovery or recognition of any human remains in any location other than a dedicated cemetery, there shall be no further excavation or disturbance of the site, or any nearby area reasonably suspected to overlay adjacent remains, until the County Coroner has examined the remains. If the County Coroner determines the remains to be those of a Native American or has reason to believe that they are those of a Native American, the County Coroner shall contact the Native American Heritage Commission by telephone within 24 hours. In addition, any person who mutilates or disinters, wantonly disturbs, or willfully removes any human remains in or from any location other than a dedicated cemetery without authority of law is guilty of a misdemeanor.

2.2.2.3 Local

County of San Diego – Resource Protection Ordinance (Code of Regulatory Ordinances, Sections 86.601–86.608)

The County's Resource Protection Ordinance (RPO) requires that cultural resources be evaluated as part of the County's discretionary environmental review process, and if resources are determined to be significant under the RPO, they must be preserved. Pursuant to Section 86.603, the RPO is applicable to discretionary applications such as Tentative Map, Tentative Parcel Map, Revised Tentative Map, Revised Tentative Parcel Map, Rezone, Major Use Permit, Major Use Permit Modification, Site Plan, Vacation of Open Space Easement Expired Map, Certificate of Compliance, or Administrative Permit. The Proposed Project is a countywide program that protects the public from vector-borne disease and public nuisances and would continue to comprehensively implement vector control through various techniques. As such, it is not a discretionary application. Therefore, the RPO is not applicable to the Proposed Project.

County of San Diego – Zoning Ordinance

The County's Zoning Ordinance provides for the designation and regulation of "special areas." One type of special area is a Historic/Archaeological Landmark or District. These resources may be assigned an "H" designator for historic areas or a specific district designator. The purpose of these provisions is to identify, preserve, and protect the historical, cultural, archaeological, and/or architectural resource values of designated landmarks and districts. Zoning regulations for these resources are designed to preserve their integrity and content. Other types of resources of equal or greater significance may exist and be designated in other ways, such as the NRHP or CRHR.

County of San Diego – Resource Conservation Areas

County of San Diego Resource Conservation Areas are identified lands requiring special attention to conserve resources in a manner best satisfying public and private objectives. The appropriate implementation actions will vary depending on the conservation objectives of each resource but may include public acquisition; establishment of open space easements; application of special land use controls, such as cluster zoning, large lot zoning, and scenic or natural resource preservation overlay zones; or incorporation of special design considerations into subdivision maps or Special Use Permits. Resource Conservation Areas include but are not limited to the following: groundwater problem areas, coastal wetlands, native wildlife habitats, construction quality sand areas, littoral sand areas, astronomical dark sky areas, unique geologic formations, and significant archaeological and historical sites. County departments and other public agencies

must give careful consideration and special environmental analysis to all projects in Resource Conservation Areas.

San Diego County Local Register of Historical Resources

The purpose of the San Diego County Local Register of Historical Resources is to develop and maintain “an authoritative listing and guide to be used by local agencies, private groups, and citizens in identifying historical resources within the county...and to indicate which resources deserve to be protected, to the extent prudent and feasible, from substantial adverse change.” Sites, places, or objects that are eligible for the NRHP or the CRHR are automatically included in the San Diego County Local Register of Historical Resources. If a resource meets any one of the following criteria as outlined in the local register, it will be considered an important resource:

1. Is associated with events that have made a significant contribution to the broad patterns of San Diego County's history and cultural heritage;
2. Is associated with the lives of persons important to the history of San Diego County or its communities;
3. Embodies the distinctive characteristics of a type, period, San Diego County region, or method of construction, or represents the work of an important creative individual, or possesses high artistic values; or
4. Has yielded, or may be likely to yield, information important in prehistory or history.

Integrated Vector Management Program Best Management Practices

The Integrated Vector Management Program (IVMP) follows best management practices (BMPs) described in State guidance documents, such as the *Best Management Practices for Mosquito Control in California* (CDPH 2012), *Best Management Practices for Mosquito Control on California State Properties* (CDPH 2008a), and *California Mosquito-Borne Virus Surveillance and Response Plan* (CDPH 2021), which detail best integrated vector management practices for vector control and vector-borne disease prevention. Additionally, the Proposed Project includes BMPs intended to minimize impacts associated with IVMP activities. The following BMPs have been developed by the VCP in combination with the above-referenced sources and are applicable to cultural resources:

- A1: The Vector Control Program (VCP) performs public education and outreach activities to educate residents on how to prevent mosquito breeding and other vector problems at their homes, businesses, and properties; how to protect themselves from being bitten by mosquitoes; and how to report dead birds and mosquito-breeding sources, including unmaintained pools, to prevent the spread of mosquito-borne diseases. Reducing vector breeding minimizes the need for VCP control activities.
- A3: To help minimize the need for pesticide application or vegetation management, surveillance and monitoring at known or suspected vector sites will continue to be performed to assess vector species abundance and distribution and if they are carrying diseases. Information obtained from surveillance is evaluated with risk-based response criteria and other factors to decide when and where to implement vector control measures, such as pesticide application, and to help form action plans that reduce the risk of disease transmission and assist in reducing environmental impacts.

- A4: All pesticides (i.e., chemical and biological controls) applied by the VCP are approved by the California Department of Pesticide Regulation, and their application will continue to abide by all label instructions and regulations of the U.S. Environmental Protection Agency and California Department of Pesticide Regulation, including application rates and methods, storage, transportation, mixing, and container disposal. In addition, the VCP will continue to comply with all pesticide reporting, equipment calibration, and inspection requirements as regulated by the County Agricultural Commissioner.
- A5: In accordance with CDPH regulations, pesticides will only be applied by Certified Vector Control Technicians. VCP staff who apply pesticides or remove vegetation will continue to complete all training required by the CDPH to maintain status as a Certified Vector Control Technician and will follow the VCP's comprehensive documents, including the annual *Engineer's Report*, strategic response plans, and standard operating procedures to avoid and minimize negative environmental impacts. These activities are conducted in accordance with the BMPs described in the *Best Management Practices for Mosquito Control in California* (CDPH 2012), *Best Management Practices for Mosquito Control on California State Properties* (CDPH 2008a), and *California Mosquito-Borne Virus Surveillance and Response Plan* (CDPH 2021), which detail integrated vector best management practices for vector control and vector-borne disease prevention to ensure pesticides are selected and applied appropriately and potential impacts on non-targeted areas are eliminated or minimized.
- A14: Individual IVMP source reduction activities that involve ground disturbance (e.g., grading, earthwork, or other excavation activities) will undergo a preliminary planning review by the County to assess the degree to which each activity may potentially result in impacts to cultural and Tribal Cultural Resources. The County will review available records documentation and determine whether known archaeological or tribal resources are present in the proposed activity area or ascertain the potential that such resources may be encountered. Per the *County of San Diego Report Format and Content Requirements, Cultural Resources: Archaeological and Historic Resources*, project sites that have been previously surveyed within 5 years or less may use the previous study (County 2007b). As such, if preliminary planning review determines that the IVMP activity area has been previously surveyed for the presence of archaeological or tribal resources within the last 5 years with negative results or has been previously disturbed (e.g., grading, earthwork, or other excavation activities), the area would be considered "low sensitivity," and no further evaluation would be required. If the results of the review determine that the area has not previously been surveyed or disturbed or has been surveyed and archaeological and/or tribal resources have been identified, a site-specific cultural resource survey will be required.

2.2.3 Analysis of Project Effects and Determination as to Significance

Based on Appendix G of the CEQA Guidelines and the *County of San Diego Guidelines for Determining Significance – Cultural Resources: Archaeological and Historic Resources* (County 2007b), the Proposed Project would result in a significant impact if it would:

1. Cause a substantial adverse change in the significance of a historical resource as defined in Section 15064.5 of the CEQA Guidelines. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner consistent with the Secretary of Interior Standards.

2. Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.
3. Disturb any human remains, including those interred outside of formal cemeteries.

The Proposed Project is a countywide program that protects the public from vector-borne diseases and public nuisances and would continue to comprehensively implement integrated vector management practices. Because specific locations of IVMP activities have not been defined at this time, record searches and field surveys were not conducted for the Proposed Project. In addition, this Program Environmental Impact Report analysis is qualitative in nature and does not provide specific locations of resources.

2.2.3.1 Historical Resources

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and the *County of San Diego Guidelines for Determining Significance – Cultural Resources: Archaeological and Historic Resources* (County 2007b), the Proposed Project would have a significant impact on the environment if it would result in a substantial adverse change in the significance of a historical resource as defined in Section 15064.5. This shall include the destruction, disturbance, or any alteration of characteristics or elements of a resource that cause it to be significant in a manner consistent with the Secretary of the Interior Standards.

Impact Analysis

The *Cultural Resources Technical Report* (HELIX 2021b; Appendix C) evaluated program-level impacts associated with implementation of the IVMP. Under the Proposed Project, the IVMP would continue to comprehensively approach vector control through various techniques, including surveillance and monitoring, source reduction (i.e., physical control), source treatment (i.e., biological and chemical controls), public education, outreach, and disease diagnostics. Of these, only source reduction would potentially result in tangible impacts to cultural resources due to the potential ground-disturbing or physical impacts that environmental modifications could entail.

Physical controls could potentially include but not be limited to removal of vegetation or sediment; interruption of water flow; rotation of stored water; pumping and/or filling of water sources; improvements to drainage and water circulation systems; and installation, removal, or improvements of culverts, tide gates, or other water control structures. Although no structures or buildings associated with vectors are anticipated to be constructed, physical control activities could potentially result in direct or indirect impacts to cultural resources. Unrecorded or unevaluated archaeological sites may require research or testing programs to determine their eligibility for inclusion in the CRHR or San Diego County Local Register of Historical Resources. If an archaeological resource is found to be eligible for inclusion in the CRHR or San Diego County Local Register of Historical Resources, it would be considered a “historical resource” in accordance with CEQA Guidelines, Section 15064.5(c).

As a result, the Proposed Project could have the potential to cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines, resulting in a **potentially significant impact (CR-1)**.

2.2.3.2 Archaeological Resources

Guidelines for the Determination of Significance Analysis

Based on Appendix G of the CEQA Guidelines and the *County of San Diego Guidelines for Determining Significance – Cultural Resources: Archaeological and Historic Resources* (County 2007b), the Proposed Project would have a significant impact on the environment if it would result in a substantial adverse change in the significance of a unique archaeological resource as defined under Section 15064.5. This shall include the destruction or disturbance of an important archaeological site or any portion of an important archaeological site that contains or has the potential to contain information important to history or prehistory.

Impact Analysis

The *Cultural Resources Technical Report* (HELIX 2021b; Appendix C) evaluated program-level impacts associated with implementation of the IVMP. As discussed in the *Cultural Resources Technical Report*, the County conducted consultation with tribal governments in accordance with Assembly Bill 52. On August 23, 2018, the County notified all applicable Native American tribes of the IVMP Notice of Preparation. On August 28, 2018, the Viejas Band of Kumeyaay Indians provided a response letter requesting compliance with CEQA, the National Environmental Policy Act, and NAGPRA in addition to immediately contacting the band of any project changes or inadvertent discoveries.

As described above, the only IVMP activity that would potentially result in tangible impacts to cultural resources is source reduction due to the potential ground-disturbing or physical impacts that environmental modifications could entail. Source reduction activities involving ground-disturbing work that may occur within or near archaeological resources, within previously undisturbed areas, or within previously disturbed areas with known cultural resource sensitivity could result in potential impacts if archaeological resources present on or below the ground surface are damaged or destroyed.

Unrecorded or unevaluated archaeological sites may require research or testing programs to determine their eligibility for inclusion on the CRHR or San Diego County Local Register of Historical Resources. Adverse effects to known significant or unique archaeological resources may result in a loss of valuable information that could be gained from the resources or prevent potentially eligible sites from being listed on a register of cultural resources. Existing federal, State, and local regulations, as well as the proposed BMPs identified in Section 2.2.2, *Regulatory Setting*, would minimize potential impacts. However, since specific sites cannot be defined at this time, it is anticipated that ground-disturbing activities could have the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines, resulting in a **potentially significant impact (CR-2)**.

2.2.3.3 *Human Remains*

Guidelines for the Determination of Significance

Based on Appendix G of the CEQA Guidelines and the *County of San Diego Guidelines for Determining Significance – Cultural Resources: Archaeological and Historic Resources* (County 2007b), the Proposed Project would have a significant impact on the environment if it would disturb any human remains, including those interred outside formal cemeteries.

Impact Analysis

The *Cultural Resources Technical Report* (HELIX 2021b; Appendix C) evaluated program-level impacts associated with implementation of the IVMP. Pursuant to CEQA Guidelines, Section 15064.5, a project must be evaluated for its potential to disturb any human remains, including those interred outside formal cemeteries. Archaeological materials, including human burials, have been found throughout unincorporated San Diego County and incorporated cities serviced by the IVMP. Human burials have occurred outside formal cemeteries, usually associated with archaeological resource sites and prehistoric people. While some burials have been uncovered, the potential exists for unknown burials to be present within areas potentially requiring physical control activities associated with the IVMP. Ground-disturbing activities associated with implementation of the Proposed Project could have the potential to disturb human remains and result in a **potentially significant impact (CR-3)**.

2.2.4 Cumulative Impact Analysis

The geographic scope of cumulative impact analysis for cultural resources (including historical and archaeological resources) and human remains is the entirety of San Diego County, including both incorporated and unincorporated areas. Cumulative projects include countywide residential and non-residential land development, open space and recreation, and agricultural activities that have the potential for ground disturbance, vegetation removal, and pesticide use. As with cumulative projects, the Proposed Project would be required to comply with applicable federal, State, and local regulations for the protection of unique or significant cultural resources in the Service Area.¹

Historical Resources

Cumulative projects would have the potential to result in cumulative impacts associated with the loss of historical resources through the physical disturbance, relocation, or alteration of these resources. However, as discussed above, the Proposed Project has the potential to cause impacts to unrecorded or unevaluated sites that may require research or testing programs to determine their eligibility for inclusion in the CRHR or San Diego County Local Register of Historical Resources. Due to the nature and scale of the activities that could be implemented under the IVMP, the Proposed Project would be required to comply with all applicable federal, State, and local regulations. In addition, the Proposed Project would implement mitigation measures and standard operating procedures and protocols to avoid or reduce impacts to

¹ Service Area is synonymous with Assessment Area, which is defined in the Engineer's Report (County 2022a) as the area in which an annual levy provides funding for essential vector control services, including those properties that may request and/or receive direct and more frequent service and are located within the scope of the vector surveillance area. As such, Native American reservation land, as a Sovereign Nation, is excluded from the Service Area along with federally owned lands that receive minimal to no services.

historical resources. As a result, the Proposed Project would not result in a cumulatively considerable contribution to cumulative historical resources impacts.

Archaeological Resources

The Proposed Project has the potential to cause impacts to unknown archaeological resources during source reduction ground-disturbing activities. Due to the nature and scale of the activities that could be implemented under the IVMP, the Proposed Project would be required to comply with all applicable federal, State, and local regulations. In addition, the Proposed Project would implement mitigation measures and standard operating procedures and protocols to avoid or reduce impacts to archaeological resources. As a result, the Proposed Project would not result in a cumulatively considerable contribution to cumulative archaeological resources impacts.

Human Remains

The Proposed Project has the potential to cause impacts to human remains during source reduction ground-disturbing activities. Due to the nature and scale of the activities that could be implemented under the IVMP, the Proposed Project would be required to comply with all applicable federal, State, and local regulations. In addition, the Proposed Project would implement mitigation measures and standard operating procedures and protocols to avoid or reduce impacts to human remains. As a result, the Proposed Project would not result in a cumulatively considerable contribution to cumulative human remains impacts.

2.2.5 Significance of Impacts Prior to Mitigation

The Proposed Project would result in potentially significant impacts to cultural resources and human remains prior to mitigation.

- CR-1** Ground-disturbing activities have the potential to cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5 of the CEQA Guidelines.
- CR-2** Ground-disturbing activities have the potential to cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5 of the CEQA Guidelines.
- CR-3** Ground-disturbing activities have the potential to disturb human remains.

2.2.6 Mitigation Measures

Although ground-disturbing activities associated with the Proposed Project are expected to generally be minor in scale, source reduction activities could potentially result in direct or indirect impacts to cultural resources. As such, the following mitigation measures are identified for individual activities that would involve ground-disturbing work to guide the identification, evaluation, and mitigation of potential impacts to cultural resources, if encountered.

Significant impacts to historical resources (**CR-1**) would be mitigated through the implementation of the following Mitigation Measure M-CR-1:

- M-CR-1** **Site-Specific Cultural Resources Survey.** For individual Integrated Vector Management Program source reduction activities that have been determined to

have the potential to result in impacts to cultural resources, as identified in the Integrated Vector Management Program Best Management Practices (A14), a qualified archaeologist shall be retained to conduct a site-specific cultural resource survey if the site has not been surveyed in the previous 5 years. The survey shall consist of a record search of the California Historical Resources Information System housed at the South Coastal Information Center, research to identify historic land use in the area, and a pedestrian survey that includes the participation of a Native American monitor. A review of the Sacred Lands File maintained by the Native American Heritage Commission shall also be requested for the individual Integrated Vector Management Program activity. A report shall be prepared to discuss the survey and record search results.

Cultural Resources Evaluation. If potential cultural resources are identified in an individual Integrated Vector Management Program activity area where ground disturbance is proposed, a cultural resources significance evaluation shall be conducted. Specifically, a significance evaluation shall be prepared if the individual Integrated Vector Management Program activity has the potential to result in an adverse effect to (1) new cultural resources that are identified as a result of a site-specific survey, or (2) previously recorded resources that have not been previously evaluated that are re-identified during a survey, unless resources can be avoided. Per the *County of San Diego Report Format and Content Requirements, Cultural Resources: Archaeological and Historic Resources*, significance evaluations will not be required if the resource has been evaluated for California Environmental Quality Act significance or for National Register of Historic Places eligibility within the last 5 years and if there has been no change in the conditions that contributed to the determination of resource importance (County 2007b). Significance evaluation efforts may include additional research to determine whether the resource meets the criteria for listing on the California Register of Historical Resources and/or subsurface investigation. Archaeological testing programs involving subsurface investigation shall include assessing the horizontal and vertical dimensions of a site, the chronological placement, site function, artifact/ecofact density and variability, presence/absence of subsurface features, and research potential. A Native American monitor shall be retained for all subsurface investigations. Resources found to be non-significant as a result of a survey and/or assessment will require no further work beyond documentation of the resources on the appropriate California Department of Parks and Recreation site forms and inclusion of results in the survey and/or assessment report prepared for the individual Integrated Vector Control Program activity. A cultural resources report shall be prepared to discuss potential impacts associated with the individual Integrated Vector Management Program activities and identify measures to reduce all significant impacts to below a level of significance, if applicable.

Cultural Resources Data Recovery Program. If significant cultural resources are identified within an individual Integrated Vector Management Program activity area where ground disturbance is proposed, and avoidance of impacts to the resource is not possible, a data recovery program (including research design) shall be implemented. The data recovery program shall be subject to the provisions, as outlined in California Public Resources Code, Section 21083.2, and completed prior to the implementation of the individual Integrated Vector Management Program activity. Avoidance of significant cultural resources shall be sought to the extent possible.

Cultural Resources Monitoring Program. If significant cultural resources are identified or potential cultural resources are suspected to occur in an individual Integrated Vector Management Program activity area where ground disturbance is proposed, monitoring shall be required by an archaeologist and Native American monitor. If unevaluated potentially significant cultural resources are discovered, construction activities shall be diverted away from the discovery until significance evaluation can be conducted.

To mitigate potential impacts to significant cultural resources, a data recovery program for any newly discovered cultural resource would be prepared, approved by the County, and implemented using professional archaeological methods. Construction activities would be allowed to resume after the completion of the recovery of an adequate sample and the recordation of features. All cultural material collected during the data recovery program or monitoring program would be processed and curated at a San Diego County facility that meets federal standards per Code of Federal Regulations, Title 36, Part 79, unless the Native American monitors request the collection.

After monitoring is completed, an appropriate report shall be prepared. If no significant cultural resources are discovered, a brief letter shall be prepared. If significant cultural resources are discovered, a report with the results of the monitoring and any data recovery (including the interpretation of the data within the research context) shall be prepared.

Significant impacts to archaeological resources **(CR-2)** would be mitigated through the implementation of Mitigation Measure M-CR-1.

Significant impacts to human remains **(CR-3)** would be mitigated through the implementation of the following Mitigation Measure M-CR-2:

M-CR-2 Identification of Human Remains. In the event that human remains are discovered during individual Integrated Vector Management Program source reduction activities, work shall halt in the identified area, the County Medical Examiner² shall be contacted, and California Public Resources Code, Section 5097.98; CEQA Guidelines, Section 15064.5; and California Health and Safety Code, Section 7050.5, shall be followed. If the remains are determined to be of Native American origin, the most likely descendant shall be identified by the Native American Heritage Commission and contacted by the County to determine proper treatment and disposition of the remains.

2.2.7 Conclusion

Historical Resources

Implementation of the Proposed Project would not result in substantial adverse changes to the significance of historical structures. However, the Proposed Project would result in ground-disturbing activities that could have the potential to cause a substantial adverse change in the significance of an unrecorded or unevaluated archaeological site that may require research or

² For CEQA compliance, California Health and Safety Code, Section 7050.5; California Public Resources Code, Section 5097.98; and CEQA Guidelines, 15064.5, require a coroner. However, in San Diego County, this requirement is fulfilled by the Medical Examiner.

testing programs to determine their eligibility for inclusion in the CRHR or San Diego County Local Register of Historical Resources. Therefore, the Proposed Project would result in a potentially significant impact to historical resources (**CR-1**). However, mitigation measure **M-CR-1** would mitigate the Proposed Project's potentially significant impacts related to historical resources to a less than significant level. With program-level mitigation and compliance with applicable federal, State, and local regulations for the protection of unique or significant historical resources mitigation, the Proposed Project will not contribute to cumulatively considerable historical resources impact.

Archaeological Resources

Implementation of the Proposed Project would result in ground-disturbing activities that could have the potential to cause a substantial adverse change in the significance of an archaeological resource, including the potential destruction or disturbance of an archaeological site that contains or has the potential to contain information important to history or prehistory. Therefore, the Proposed Project would result in a potentially significant impact to archaeological resources (**CR-2**). However, mitigation measure **M-CR-1** would mitigate the Proposed Project's potentially significant impacts related to archaeological resources to a less than significant level. With program-level mitigation and compliance with applicable federal, State, and local regulations for the protection of unique or significant cultural resources, the Proposed Project will not contribute to cumulatively considerable archaeological resources impacts.

Human Remains

Implementation of the Proposed Project would result in ground-disturbing activities that could have the potential to disturb human remains, including those discovered outside formal cemeteries. Therefore, the Proposed Project would result in a potentially significant impact associated with human remains prior to mitigation (**CR-3**). However, mitigation measure **M-CR-2** would mitigate the Proposed Project's potentially significant impacts related to human remains to a less than significant level. With program-level mitigation and compliance with applicable federal, State, and local regulations, the Proposed Project will not contribute to cumulatively considerable human remains impacts.